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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,551	07/25/2003	Joseph A. Zupanick	067083.0232	3531

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EXAMINER
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FREAY, CHARLES GRANT

ART UNIT	PAPER NUMBER
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3746

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/627,551	ZUPANICK, JOSEPH A.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Charles G Freay	3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-31 is/are allowed.
- 6) ☒ Claim(s) 1-18 and 32-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. This office action is in response to the amendment of November 29, 2004. In making the below rejections the examiner has considered and addressed each of the applicant's arguments.
2. The examiner notes that the Petition to correct Inventorship of November 29, 2004 has been approved.

### ***Claim Objections***

3. Claims 19 and 24 are objected to because of the following informalities: in line 3 of each of the claims "section" should be "suction". Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

4. Claims 40 and 41 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Upon cursory review the examiner does not believe that the specification previously described ceasing flow generated by the pump ion response to a decrease in the fluid pressure.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 3746

5. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims have been amended to set forth that movement of the valve "causes the pumped fluid to be recirculated from the outlet back into the pumping unit *between the outlet and the inlet of the pumping unit.*" It is not clear what is meant by "between the outlet and the inlet...". This limitation could mean that the fluid as it recirculates travels from the outlet back to the inlet (which seems to follow from the definition of recirculation). Or the limitation could mean that the recirculated fluid enters into the pumping unit at a location between the inlet of the pump and the outlet of the pump. This interpretation of the claim would depend upon what was being considered the inlet of the pump (opening 204 or opening 118 in Fig. 2). Clarification of this limitation is required. For purposes of examination in this office action the examiner has assumed that the first interpretation of the limitation was intended (the examiner notes that this interpretation corresponds to the description given in the specification at page 19 the first full paragraph).

### ***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Art Unit: 3746

6. Claims 1, 3, 12 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Kramer as set forth in the first office action.

The examiner notes that the rejection with respect to claim 5 has been withdrawn since the valve member shown in Fig. 3 of Kramer is not adjacent the inlet valve.

7. Claims 32, 36 and 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Fitzpatrick (USPN 4,125,163).

Fitzpatrick discloses a pump and a method of pumping having a pump unit (34, 36,54) with a passage extending to the suction end of the pumping unit (the examiner notes that all pumps by definition have a passage through them for fluid flow which must extend up to the inlet of the pump, while the passage may not be an open or uninterrupted passage as set of in the applicant's disclosure, such a passage meets the claim limitations). There is a pressure sensor (12) for determining pressure within the well. And there is a controller (20) for decreasing pump speed or fluid flow with decreasing pressure and increases flow rate with increasing pressure. Note col. 2 lines 12-34.

8. Claims 32- 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Cholet et al (USPN 4,718,824).

Cholet et al discloses a pump and a method of pumping having a pump unit (1) with a passage extending to the suction end of the pumping unit (the examiner notes that all pumps by definition have a passage through them for fluid flow which must extend up to the inlet of the pump, while the passage may not be an open or

Art Unit: 3746

uninterrupted passage as set of in the applicant's disclosure, such a passage meets the claim limitations). There is a pressure sensor (28) for determining pressure within the well. And there is a controller (30) for decreasing pump speed or fluid flow with decreasing pressure and increases flow rate with increasing pressure. Note col. 5 line 59 to col. 6 line 21. The examiner notes that at line 53 of Col. 5 Cholet et al note that the control signal can be zero. Which would indicate that the pump is stopped and flow would cease.

#### ***Allowable Subject Matter***

9. Claims 19-31 are allowed.
10. Claims 2, 4-11, 13, 14 and 16-18 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
11. The examiner notes that with respect to claims 32-42 if the passage were more clearly defined and the pressure sensor was associated with the passage then the claims would likely define over the applied prior art.

#### ***Response to Arguments***

12. Applicant's arguments filed November 29, 2004 have been fully considered but they are not persuasive.
13. The applicant's argument against the Kramer reference is that it fails to disclose that the fluid is recirculated between the outlet and the inlet. The examiner disagrees.

Art Unit: 3746

As shown in Figs. 1 and 2 the recirculated fluid leaving the (98) through valves 36 and openings 30 would enter the well and then reenter the inlet 100.

14. The amendments to the claims and the applicant's remarks have overcome the previous rejections set forth under 35 USC 103 over Avramidis in view of Amani.

15. The Terminal Disclaimer filed with the amendment has overcome the previous obviousness-type double patenting rejections.


### ***Conclusion***

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles G Freay whose telephone number is 571-272-4827. The examiner can normally be reached on Monday through Friday 8:30 A.M. to 5:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3746

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Charles G Freay  
Primary Examiner  
Art Unit 3746

CGF  
January 21, 2005